

WHAT IS CLAIMED IS:

1. A system for updating a library in a design database environment operable to be accessed by at least one design user, comprising:

a first engine for associating an update file with appropriate design objects to generate an uncompiled update file in a trusted space environment;

a second engine associated with said trusted space environment for compiling said uncompiled update file into a compiled update file; and

a third engine for transferring said compiled update file from said trusted space environment into said library in said design database environment.

2. The system as recited in claim 1, wherein said design database environment is immune to corruption in an event of an unsuccessful compilation in said trusted space environment.

3. The system as recited in claim 1, wherein said update file includes files relating to a design element selected from the group consisting of gates, latches, passive elements, combinatorial elements.

4. The system as recited in claim 1, wherein said third engine effectuates the transfer of said compiled update file via a symbolic link between said trusted space environment and said design database environment.

5. The system as recited in claim 1, wherein said third engine is operable to transfer said compiled update file from said trusted space environment into an archive database.

6. The system as recited in claim 1, wherein said first engine, said second engine, and said third engine are integrated within a synthesis interface.

7. A computer-implemented method for updating a library in a design database environment operable to be accessed by at least one design user, comprising:

associating an update file with appropriate design objects to generate an uncompiled update file in a trusted space environment;

compiling said update file to produce a compiled update file in said trusted space environment; and

transferring said compiled update file from said trusted space environment into said library in said design database environment.

8. The computer-implemented method as recited in claim 7, further comprising isolating said trusted space environment from said design database environment.

9. The computer-implemented method as recited in claim 7, further comprising transferring said compiled update file from said trusted space environment to an archive database.

10. The computer-implemented method as recited in claim 7, further comprising building a symbolic link from said trusted space environment to said library in said design database environment.

11. The computer-implemented method as recited in claim 10, wherein the operation of transferring said compiled update file further comprises transferring said compiled update file from said trusted space environment into said library in said design database environment via said symbolic link.

12. The computer-implemented method as recited in claim 7, further comprising incorporating said compiled update file into a synthesis file structure within said design database environment.

13. A computer-readable medium operable with a computer platform for updating a library in a design database environment operable to be accessed by at least one design user, the medium having stored thereon:

instructions for associating an update file with appropriate design objects to generate an uncompiled update file in a trusted space environment;

instructions for compiling said update file to produce a compiled update file in said trusted space environment; and

instructions for transferring said compiled update file from said trusted space environment into said library in said design database environment.

14. The computer-readable medium as recited in claim 13, further comprising instructions for isolating said trusted space environment from said design database environment.

15. The computer-readable medium as recited in claim 13, further comprising instructions for transferring said compiled update file from said trusted space environment to an archive database.

16. The computer-readable medium as recited in claim 13, further comprising instructions for building a symbolic link from said trusted space environment to said library in said design database environment.

17. The computer-readable medium as recited in claim 16, wherein said instructions for transferring said compiled update file further comprise instructions for transferring said compiled update file from said trusted space environment into said library in said design database environment via said symbolic link.

18. The computer-readable medium as recited in claim 13, further comprising instructions for incorporating said compiled update file into a synthesis file structure within said design database environment.



19. A computer system, comprising:
- a database design environment having a design library;
  - a user interface operable to generate updates for said library; and
  - a synthesis interface for transferring said updates from said user interface to said design library by establishing a trusted space environment that provides for building of said updates prior to the transfer of said updates.

20. The computer system as recited in claim 19, wherein said design library is a library selected from the group consisting of a primary library, an archive library, and a testing library.

21. The computer system as recited in claim 19, wherein said design library comprises a standard cell library.

22. The computer system as recited in claim 19, further includes a structure for compiling said updates.

23. The computer system as recited in claim 19, wherein said synthesis interface is operable to transfer said updates from said trusted space environment to said design library via a symbolic link.

24. The computer system as recited in claim 19, wherein said synthesis interface is operable to transfer said updates from said trusted space environment to an archive database.

25. A library infrastructure system for maintaining a database in a design environment, comprising:

a first design library in a stable space operable to be accessed by at least one user;

a second design library in an unstable space operable to be accessed by at least one librarian; and

an interface for facilitating file updates of said first and second design libraries, said interface being operable to build said file updates in a trusted space and appropriately transfer said file updates to said first and second design libraries.

26. The library infrastructure system as recited in claim 25, wherein said first and second design libraries are redefined such that said first design library resides in said unstable space operable to be accessed by at least one librarian and said second design library resides in said stable space operable to be accessed by at least one user.

27. The library infrastructure system as recited in claim 25, wherein permissions associated with said first and second design libraries are changed such that said first design library resides in said unstable space operable to be accessed by at least one librarian and said second design library resides in said stable space operable to be accessed by at least one user.

28. The library infrastructure system as recited in claim 25, further comprising a third design library operable to be accessed by said at least one user for testing purposes.

29. The library infrastructure system as recited in claim 25, further comprising a third design library operable to store an archive of the contents of said first design library.

30. The library infrastructure system as recited in claim 25, wherein said second design library is provided to be a mirror copy of said first design library.

31. A computer-implemented system for updating a library in a design database environment operable to be accessed by at least one design user, comprising:

means for associating an update file with appropriate design objects to generate an uncompiled update file in a trusted space environment;

means for compiling said uncompiled update file into a compiled update file; and

means for transferring said compiled update file from said trusted space environment into said library in said design database environment.

32. The computer-implemented system as recited in claim 31, wherein said design database environment is immune to corruption in an event of an unsuccessful compilation in said trusted space environment.

33. The computer-implemented system as recited in claim 31, wherein said update file includes files relating to a design element selected from the group consisting of gates, latches, passive elements, combinatorial elements.

34. The computer-implemented system as recited in claim 31, wherein said means for transferring said compiled update file effectuates the transfer of said compiled update file via a symbolic link between said trusted space environment and said design database environment.

35. The computer-implemented system as recited in claim 31, wherein said means for transferring said compiled update file is operable to transfer said compiled update file from said trusted space environment into an archive database.